

WHAT IS CLAIMED IS:

1. A method of manufacturing a web-winding device, comprising the step of:

providing a generally cylindrical injection molded support structure having an outer web wrapping surface for receiving at least one convolution of a web and, an interior portion having an annular surface joined to the outer web wrapping surface, said outer web wrapping surface having a surface texture less than 0.5 microns Ra to produce a static coefficient of friction x_1 between the outer web wrapping surface and a first contact surface of said at least one convolution of web and a second contact surface of an at least a partial second convolution of said web produces a static coefficient of friction x_2 , wherein x_1 is less than x_2 .

2. The method recited in claim 1 wherein said step of providing a generally cylindrical injection molded support structure further comprises the step of providing said outer web wrapping surface with a material selected from the group consisting of modified amorphous thermoplastic resins and semi-crystalline thermoplastic resins.

3. The method recited in claim 2 wherein said step of providing said outer web wrapping surface further comprises the step of providing said modified amorphous thermoplastic resin selected from the group including lubricated polycarbonate and silicone polycarbonate copolymers.

4. The method recited in claim 2 wherein step of providing a modified amorphous thermoplastic resin further includes the step of providing said semi-crystalline thermoplastic resins with a material selected from the group including polybutylene-terephthalate, polybutylene-terephthalate/polycarbonate alloys and a modified polybutylene-terephthalate.

5. The method recited in claim 4 wherein said step of providing said modified polybutylene-terephthalate further includes the step of providing said modified polybutylene-terephthalate with about 20 wt-% solid glass bead.